

CLAIMS

What is claimed is:

- 5        1. A computing system comprising:
  - a port configured to operably connect an external device to the computing system; and
  - a mode controller operably connected to the port, and configured to configure the port between a powered mode and a non-powered mode in accordance with a programmatically selected port configuration.
- 10        2. The computing system of claim 1 where the port is a serial port including one or more pins.
- 15        3. The computing system of claim 2 where the mode controller includes:
  - a non-powered port logic connected to the port and being configured to operate the serial port in the non-powered mode;
  - a powered port logic connected to the port and being configured to apply power to the port to operate the port in the powered mode; and
  - a switching logic configured to switch operations between the non-powered port logic and the powered port logic based on the programmatically selected port configuration.
- 20        4. The computing system of claim 3 where the non-powered port logic and the powered port logic are operably connected to at least one pin of the port.
- 25        5. The computing system of claim 1 where the port is a serial port including at least a ring indicator pin and a data carrier detect pin, and where the system further including:
  - a ring indicator circuit connected to the ring indicator pin;
  - a data carrier detect circuit connected to the data carrier detect pin; and
  - the mode controller being operably connected to the ring indicator circuit and the data carrier detect circuit where in the powered mode, the mode controller is configured to change functionally of both the ring indicator circuit and the data carrier detect circuit to cause the ring indicator pin and the data carrier detect pin to receive power.

6. The computing system of claim 1 further including a mode indicator configured to identify whether the port is in the powered mode or in the non-powered mode.
- 5 7. The computing system of claim 6 where the mode indicator includes at least one light emitting diode.
8. The computing system of claim 6 where the mode indicator includes processor executable instructions that cause a processor to determine a current mode of the port and display a visual indication of the current mode.
- 10 9. The computing system of claim 1 further including a graphical user interface configured to allow a user to programmatically select between the powered mode and the non-powered mode for the port, and in response to a selection, causing the port configuration to be set.
- 15 10. The computing system of claim 1 further including a plurality of ports configured to operably connect an external device to the computing system.
11. A method for controlling a port, comprising:
- 20 programmatically setting a mode control signal that identifies whether a port is to be in a powered mode or a non-powered mode;
- and
- if the mode control signal indicates the powered mode, applying power to the port;
- 25 if the mode control signal indicates the non-powered mode, disconnecting power to the port and configuring the port to process data signals.
12. The method of claim 11 where the port includes a pin connected to a ring indicate circuit configured to provide a ring indicate function that indicates whether a ring signal is received by the port, and when the mode control signal is set for the powered mode, disconnecting the ring indicate function.
- 30 13. The method of claim 11 where the port includes a pin connected to a data carrier detect circuit configured to provide a data carrier detect function that indicates whether a data

carrier is detected by the port, and when the mode control signal is set for the powered mode, disconnecting the data carrier detect function.

14. The method of claim 11 where the programmatically setting step includes:  
5 displaying port configuration options including at least the powered mode and the non-powered mode;  
allowing a user to make a configuration selection from the port configuration options for a selected port; and  
setting the mode control signal in accordance with the configuration selection.  
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15. The method of claim 14 further including:  
setting a port mode flag for the selected port in response to the configuration selection; and  
reading, during an initialization of the port, the port mode flag and setting the mode control signal based on the port mode flag.  
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16. The method of claim 11 where the programmatically setting step includes generating an electrical signal to set the mode control signal.  
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17. A system, comprising:  
a port having a plurality of pins configured to operably connect the system to an external device;  
a circuit operably connected to at least one pin in the port and configured to provide a signal processing function;  
25 a port mode controller operably connected to the circuit and configured to change a mode of the circuit between providing the signal processing function and providing power; and  
a graphical user interface configured to allow a user to select a port configuration for the port including a powered mode and a non-powered mode, where the port mode controller changes the mode of the circuit based on the port configuration.  
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18. The system of claim 17 where the circuit includes a powered port logic configured to apply power to the at least one pin; and

5 where the port mode controller includes a switching logic configured to disconnect the signal processing function of the circuit and connect the powered port logic when the port configuration indicates the powered mode.

10 19. The system of claim 17 further including an input/output controller chip configured to process input/output signals between the system and the port, the input/output controller being configured to generate a mode control signal that causes the port mode controller to change the mode of the circuit where the mode control signal is generated in accordance with the port configuration.

15 20. The system of claim 17 including a memory for storing the port configuration.

21. The system of claim 17 where the circuit includes a ring indicate circuit configured to provide a ring indicate function.

20 22. The system of claim 17 where the circuit includes a carrier detect circuit configured to detect a presence of a carrier signal on the port.

25 23. The system of claim 17 further including a mode indicator configured to visually indicate the port configuration of the port.

24. A computer-readable medium storing processor executable instructions operable to perform a method, the method comprising:

providing a port mode option that indicates whether a port is to be in a powered mode; and

30 programmatically configuring the port mode option based on a user selection where the port mode option is configured to cause logic to change an operating mode of the port.

25. The computer-readable medium of claim 24 further including instructions operable to:

determine the port mode; and  
display an indicator that represents the port mode.

26. A system, comprising:

5           port means for operably connecting an external device to the computing system; and  
mode controller means for configuring the port between a powered mode and a non-powered mode in accordance with a port configuration that is programmatically selectable.

27. The system of claim 26 further including a means for programmatically selecting the  
10          port configuration.

28. The system of claim 26 further including mode indicator means for indicating the port configuration.

15          29. In a computer system having a graphical user interface comprising a display and a selection device, a method of providing and selecting from a set of data entries on the display, the method comprising:

              displaying a port mode option for a selected port where the port mode option includes at least a powered mode and a non-powered mode;

20           receiving a data entry selection signal indicative of the selection device selecting the port mode option; and

              configuring the port mode option in response to the data entry selection signal, the port mode option being configured to cause the selected port to function in the powered mode or in the non-powered mode.